

Andrew W Poon

List of Publications by Year in descending order

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121
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docs citations

121
times ranked

2036
citing authors

#	ARTICLE	IF	CITATIONS
1	Cascaded Microresonator-Based Matrix Switch for Silicon On-Chip Optical Interconnection. Proceedings of the IEEE, 2009, 97, 1216-1238.	16.4	225
2	Low-Loss Multimode-Interference-Based Crossings for Silicon Wire Waveguides. IEEE Photonics Technology Letters, 2006, 18, 2260-2262.	1.3	139
3	Electrically reconfigurable silicon microring resonator-based filter with waveguide-coupled feedback. Optics Express, 2007, 15, 9194.	1.7	117
4	Silicon electro-optic modulators using p-i-n diodes embedded 10-micron-diameter microdisk resonators. Optics Express, 2006, 14, 6851.	1.7	114
5	Fano resonance-based electrically reconfigurable add-drop filters in silicon microring resonator-coupled Mach-Zehnder interferometers. Optics Letters, 2007, 32, 781.	1.7	111
6	Silicon microring carrier-injection-based modulators/switches with tunable extinction ratios and OR-logic switching by using waveguide cross-coupling. Optics Express, 2007, 15, 5069.	1.7	106
7	Cavity-enhanced photocurrent generation by 1.55- μ m wavelengths linear absorption in a p-i-n diode embedded silicon microring resonator. Applied Physics Letters, 2009, 95, .	1.5	89
8	Silicon and hybrid silicon photonic devices for intra-datacenter applications: state of the art and perspectives [Invited]. Photonics Research, 2015, 3, B10.	3.4	87
9	Optical manipulation and transport of microparticles on silicon nitride microring-resonator-based add-drop devices. Optics Letters, 2010, 35, 2855.	1.7	80
10	Silicon High-Order Coupled-Microring-Based Electro-Optical Switches for On-Chip Optical Interconnects. IEEE Photonics Technology Letters, 2012, 24, 821-823.	1.3	73
11	Silicon cross-connect filters using microring resonator coupled multimode-interference-based waveguide crossings. Optics Express, 2008, 16, 8649.	1.7	64
12	Active resonance wavelength stabilization for silicon microring resonators with an in-resonator defect-state-absorption-based photodetector. Optics Express, 2015, 23, 360.	1.7	52
13	Towards Adaptively Tuned Silicon Microring Resonators for Optical Networks-on-Chip Applications. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 136-149.	1.9	51
14	Cascaded active silicon microresonator array cross-connect circuits for WDM networks-on-chip. , 2008, , .		47
15	Direct-modulated waveguide-coupled microspiral disk lasers with spatially selective injection for on-chip optical interconnects. Optics Express, 2014, 22, 824.	1.7	46
16	Photoresponsive spiro-polymers generated in situ by ^1H -activated polyspiroannulation. Nature Communications, 2019, 10, 5483.	5.8	46
17	Two-photon absorption photocurrent in p-i-n diode embedded silicon microdisk resonators. Applied Physics Letters, 2010, 96, .	1.5	45
18	Optical trapping of microparticles using silicon nitride waveguide junctions and tapered-waveguide junctions on an optofluidic chip. Lab on A Chip, 2012, 12, 3803.	3.1	43

#	ARTICLE	IF	CITATIONS
19	Fano resonances in prism-coupled square micropillars. <i>Optics Letters</i> , 2004, 29, 5.	1.7	42
20	Optical manipulation of microparticles using whispering-gallery modes in a silicon nitride microdisk resonator. <i>Optics Letters</i> , 2011, 36, 4257.	1.7	42
21	Epitaxial III-V-on-silicon waveguide butt-coupled photodetectors. <i>Optics Letters</i> , 2012, 37, 4035.	1.7	34
22	High-Speed Normal-Incidence p-i-n InGaAs Photodetectors Grown on Silicon Substrates by MOCVD. <i>IEEE Photonics Technology Letters</i> , 2012, 24, 237-239.	1.3	34
23	Silicon coupled-resonator optical-waveguide-based biosensors using light-scattering pattern recognition with pixelized mode-field-intensity distributions. <i>Scientific Reports</i> , 2014, 4, 7528.	1.6	34
24	An optofluidic "œtweeze-and-drag" cell stretcher in a microfluidic channel. <i>Lab on A Chip</i> , 2020, 20, 601-613.	3.1	34
25	Silicon Polygonal Microdisk Resonators. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2006, 12, 1438-1449.	1.9	33
26	Integrated Silicon Photonic Microresonators: Emerging Technologies. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2018, , 1-1.	1.9	33
27	Microring-Resonator Cross-Connect Filters in Silicon Nitride: Rib Waveguide Dimensions Dependence. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2006, 12, 1380-1387.	1.9	32
28	Reciprocal transmissions and asymmetric modal distributions in waveguide-coupled spiral-shaped microdisk resonators. <i>Optics Express</i> , 2007, 15, 14650.	1.7	32
29	Waveguide-coupled octagonal microdisk channel add-drop filters. <i>Optics Letters</i> , 2004, 29, 471.	1.7	31
30	Sub-bandgap linear-absorption-based photodetectors in avalanche mode in PN-diode-integrated silicon microring resonators. <i>Optics Letters</i> , 2013, 38, 5200.	1.7	28
31	On-Chip NRZ-to-PRZ Format Conversion Using Narrow-Band Silicon Microring Resonator-Based Notch Filters. <i>Journal of Lightwave Technology</i> , 2008, 26, 1950-1955.	2.7	27
32	Coupled spiral-shaped microdisk resonators with non-evanescent asymmetric inter-cavity coupling. <i>Optics Express</i> , 2007, 15, 17313.	1.7	26
33	Flow-assisted Single-beam Optothermal Manipulation of Microparticles. <i>Optics Express</i> , 2010, 18, 18483.	1.7	26
34	Silicon-Nitride-Based Integrated Optofluidic Biochemical Sensors Using a Coupled-Resonator Optical Waveguide. <i>Frontiers in Materials</i> , 2015, 2, .	1.2	24
35	Experimental demonstration of waveguide-coupled round-cornered octagonal microresonators in silicon nitride. <i>Optics Letters</i> , 2005, 30, 546.	1.7	22
36	Stress-released Si ₃ N ₄ fabrication process for dispersion-engineered integrated silicon photonics. <i>Optics Express</i> , 2020, 28, 17708.	1.7	22

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37	Surface modes in two-dimensional photonic crystal slabs with a flat dielectric margin. Optics Express, 2006, 14, 7368.	1.7	21
38	Dispersion-guided resonances in two-dimensional photonic-crystal-embedded microcavities. Optics Express, 2004, 12, 5711.	1.7	20
39	Planar corner-cut square microcavities: ray optics and FDTD analysis. Optics Express, 2004, 12, 4864.	1.7	19
40	Many-element coupled-resonator optical waveguides using gapless-coupled microdisk resonators. Optics Express, 2009, 17, 23617.	1.7	19
41	Unfolding a design rule for microparticle buffering and dropping in microring-resonator-based add-drop devices. Lab on A Chip, 2014, 14, 1426-1436.	3.1	19
42	Electro-optical tunable time delay and advance in a silicon feedback-microring resonator. Optics Letters, 2011, 36, 1278.	1.7	16
43	Microspiral Resonators for Integrated Photonics. Optics and Photonics News, 2008, 19, 48.	0.4	13
44	Electro-optical tunable time delay and advance in silicon microring resonators. Optics Letters, 2010, 35, 2940.	1.7	13
45	Silicon-on-insulator multimode-interference waveguide-based arrayed optical tweezers (SMART) for two-dimensional microparticle trapping and manipulation. Optics Express, 2013, 21, 1520.	1.7	13
46	A 0.5-V P-Well/Deep N-Well Photodetector in 65-nm CMOS for Monolithic 850-nm Optical Receivers. IEEE Photonics Technology Letters, 2014, 26, 1184-1187.	1.3	13
47	Modeling of coupled-resonator optical waveguide (CROW) based refractive index sensors using pixelized spatial detection at a single wavelength. Optics Express, 2011, 19, 22227.	1.7	12
48	NRZ-to-PRZ format conversion using silicon second-order coupled-microring resonator-based notch filters. , 2007, , .		11
49	Actively stabilized silicon microrings with integrated surface-state-absorption photodetectors using a slope-detection method. Optics Express, 2016, 24, 21286.	1.7	11
50	Surface plasmon resonance-assisted coupling to whispering-gallery modes in micropillar resonators. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 1981.	0.9	10
51	Photonics Filters, Switches and Subsystems for Next-generation Optical Networks. HKIE Transactions, 2004, 11, 60-67.	1.9	8
52	Integrated Si ₃ N ₄ microresonator-based quantum light sources with high brightness using a subtractive wafer-scale platform. Optics Express, 2021, 29, 24750.	1.7	8
53	Fano resonances in prism-coupled multimode square micropillar resonators. Optics Letters, 2005, 30, 1527.	1.7	7
54	Hexagonal micropillar cavities: multimode resonances and open-loop resonance linewidth broadening. , 2003, , .		6

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55	Double-notch-shaped microdisk resonator-based devices in silicon-on-insulator. , 2008, , .		5
56	Planar optical tweezers using tapered-waveguide junctions. Optics Letters, 2012, 37, 3000.	1.7	5
57	Silicon Electro-Optic Switching Based on Coupled-Microring Resonators. , 2007, , .		4
58	Silica polygonal micropillar resonators: fano line shapes tuning by using a Mach-Zehnder interferometer. , 2006, , .		3
59	Spiral Micropillar Resonator-Based Unidirectional Channel Drop Filters. , 2006, , .		3
60	Multimode-interference waveguide crossing coupled microring-resonator-based switch nodes for photonic networks-on-chip. , 2008, , .		3
61	A serial-cascaded double-microring-based silicon photonic circuit for high-speed on-chip clock-recovery applications. , 2009, , .		3
62	Surface plasmon resonance enhanced coupling to whispering-gallery modes in optical micropillar resonators. , 2006, , .		2
63	Non-evanescently pumped Raman silicon lasers using spiral-shaped microdisks. , 2007, , .		2
64	Microring resonator-coupled multimode-interference-based crossings in 2 \times 2 cross-grid array filters. , 2007, , .		2
65	Coupled spiral-shaped microdisk resonators with asymmetric non-evanescent coupling. , 2007, , .		2
66	50-element cascaded-resonator devices with gapless non-evanescent coupling using double-notch-shaped microdisks on a silicon chip. , 2008, , .		2
67	Dual-microring resonator-coupled cross-connect switch element for on-chip optical interconnection. , 2009, , .		2
68	Optofluidic microparticle splitters using multimode-interference-based power splitters. , 2012, , .		2
69	Hybrid silicon unidirectional-emission microspiral disk lasers for optical interconnect applications. , 2015, , .		2
70	Heterogeneously integrated III-V-on-silicon microspiral disk lasers for optical interconnects. , 2017, , .		2
71	Coupled-Resonator Optical Waveguide Sensors Using Multi-Channel Spatial Detection. , 2011, , .		2
72	Active Resonance Wavelength Stabilization for Silicon Microring Resonators Using Slope-Detection with an In-resonator Defect-state-absorption-based Photodetector. , 2015, , .		2

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73	Characterization of surface-state absorption in foundry-fabricated silicon ridge waveguides at 1550 nm using photocurrents. , 2016, , .		2
74	101-Element Cascaded-Microdisk Resonators on a Silicon Chip. , 2009, , .		2
75	High-speed InGaAs photodetectors with low dark current selectively grown on SOI substrate. , 2014, , .		2
76	Spiral microdisk resonator-based channel filters on a silicon chip: probing the out-of-plane scattering spectra. , 2006, , .		1
77	Design of silicon MMI crossing laterally coupled microring resonators. , 2006, , .		1
78	Spiral-Shaped Microdisk Resonator Channel Drop/Add Filters: Asymmetry in Modal Distributions. , 2007, , .		1
79	Reciprocal transmissions and asymmetric modal distributions in waveguide-coupled spiral-shaped microdisk resonators: Reply. Optics Express, 2008, 16, 5876.	1.7	1
80	Optical manipulation and transport of microparticles on a silicon nitride microracetrack resonator add-drop device. , 2010, , .		1
81	Microring and microdisk resonator-based devices for on-chip optical interconnects, particle manipulation, and biosensing. , 2011, , .		1
82	Epitaxial III–V-on-silicon waveguide butt-coupled photodetectors. , 2012, , .		1
83	CMOS photonics for optical manipulation of particles and biosensing. , 2012, , .		1
84	Optical lattice generation using vertically embedded multimode-interference square-core polymer waveguides on a silicon chip. Optics Express, 2018, 26, 14752.	1.7	1
85	Design Principles for Heterogeneously Integrated III-V-on-Silicon Microdisk Unidirectional Singlemode Lasers. , 2018, , .		1
86	Directional-Emission III-V-on-Silicon Microspiral and Double-Notch Microdisk Lasers for Optical Interconnects. , 2014, , .		1
87	Nonlinear response of silicon double-notch-shaped microdisk resonators with non-evanescent coupling. , 2008, , .		1
88	Optical manipulation of microparticles using whispering-gallery-modes in a silicon nitride microdisk resonator. , 2011, , .		1
89	Waveguide-coupled Square Micropillar Resonator-based Devices: Channel Filters and Electro-optic Switches with Embedded p-i-n Diodes. , 2006, , .		0
90	Electrically Tunable Fano Resonance Line Shapes by Using Racetrack Microresonator-Coupled Mach-Zehnder Interferometers with Embedded p-i-n Diodes. , 2006, , .		0

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91	Retrieving Dispersion Diagrams of Waveguide-Coupled Planar Photonic-Crystal-Embedded Microresonators. , 2006, , .		0
92	Silicon waveguide-coupled cctagonal microresonators with directional coupling to single modes. , 2006, , .		0
93	Silicon electro-optic modulators based on p-i-n diodes integrated microdisk and microring resonators. , 2006, , .		0
94	Silicon depletion-type microdisk electro-optic modulators using selectively integrated Schottky diodes. , 2007, , .		0
95	Silicon depletion-type microdisk electro-optic modulators using selectively integrated Schottky diodes. , 2007, , .		0
96	Spiral-shaped microdisk resonator channel drop/add filters: Asymmetry in modal distributions. , 2007, , .		0
97	Silicon electro-optic switching based on coupled-microring resonators. , 2007, , .		0
98	Non-evanescently pumped raman silicon lasers using spiral-shaped microdisks. , 2007, , .		0
99	Large-scale-integrated silicon photonics using microdisk and microring resonators. Proceedings of SPIE, 2010, , .	0.8	0
100	Feedback-controlled resonance and temporal response modulations in silicon microring resonators. , 2010, , .		0
101	Time-domain measurement of feedback-controlled electro-optically tunable time delay and advance in silicon microring resonators. , 2011, , .		0
102	Silicon microresonators for on-chip optical interconnects and optofluidics. , 2011, , .		0
103	Electro-optically tunable switches with 100GHz flat-top passband and 45dB extinction ratio using silicon high-order coupled-microring resonators for optical interconnects. , 2012, , .		0
104	Silicon-on-insulator 100µm-core multimode interferometer waveguides for two-dimensional microparticle trapping and manipulation. , 2012, , .		0
105	Silicon photonics for functional on-chip optical tweezers devices and circuits. , 2013, , .		0
106	All-silicon and epitaxially grown III-V-on-silicon photodetectors for on-chip optical interconnection applications. Proceedings of SPIE, 2013, , .	0.8	0
107	Defect-State-Absorption Photocurrent in PN-Diode-Integrated Silicon Microring Resonators. , 2013, , .		0
108	Coupled-resonator-optical-waveguide (CROW)-based On-chip Sensors with Multi-pixel Detection Using All-silicon Sub-bandgap Photodetectors. , 2014, , .		0

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109	Waveguide-integrated Unidirectional-Emission Microspiral Lasers for Optical Interconnects. , 2015, , .		0
110	A 2\AA -2 quantum photonic switch fabric using two-photon quantum interference in an integrated silicon microring resonator array. , 2015, , .		0
111	Actively stabilized silicon microring resonator switch arrays for optical interconnects. Proceedings of SPIE, 2016, , .	0.8	0
112	Waveguide-coupled round-corner octagonal microresonator channel add-drop filters. , 2004, , .		0
113	Cavity-Enhanced Photocurrent Generation in a p-i-n Diode Integrated Silicon Microring Resonator Matrix. , 2010, , .		0
114	Electro-Optical Tunable Time Delay and Advance in Silicon Feedback-Microring Resonators. , 2011, , .		0
115	Microparticle Guiding and Acceleration in Optical Lattices Generated by Silicon-on-Insulator Multimode-Interference Waveguide-based Arrayed Optical Tweezers (SMART). , 2013, , .		0
116	Silicon feedback-microring electro-optical switches with integrated surface-state-absorption linear photocurrent monitors. , 2013, , .		0
117	Dynamic switching between microparticle buffering and dropping on a silicon nitride optofluidic microring resonator. , 2013, , .		0
118	Dynamic switching between microparticle buffering and dropping on a silicon nitride optofluidic microring resonator. , 2013, , .		0
119	Actively Stabilized Silicon Microrings Integrated with Surface-state-absorption Photomonitors at 1310 nm Using a Slope-Detection Method. , 2015, , .		0
120	Integrated Optofluidic Cell Stretchers Using Optical Lattices Generated from Vertically Embedded Multimode-Interference Waveguides. , 2016, , .		0
121	Vertically Embedded Multimode-Interference Waveguide-Based Optical Stretchers for Mechanical Characterization of Cells. , 2017, , .		0